

REMARKS

Claim 1-17 are pending in this application. By this Amendment, new claim 17 is added. No new matter is added.

In the Office Action mailed June 16, 2003, claims 1-14 and 16 were rejected under 35 U.S.C. 103 as being unpatentable over Kashima et al. (U.S. patent 5,442,523) in view of EP 0724181. This rejection was traversed for the reasons discussed in Applicants' September 16, 2003, Request for Reconsideration After Final Rejection, entry of which is respectfully requested.

In an Advisory Action mailed October 3, 2003, the Examiner asserted that "Applicant argues that nowhere in Kashima et al. is a light diffusing thermoplastic layer containing barium sulfate taught or suggested...it is noted that the base layer is thermoplastic in instant claim 1 and the diffusing layer comprises barium sulfate" (page , 2, lines 1-4 of the Advisory Action).

It appears that the Examiner has not considered the issue raised by Applicants.

In particular, in present claim 1, the base transparent layer conducting light is thermoplastic, as in Kashima et al. For the latter see for instance column 7, lines 63-65 (Examples) wherein a rectangular light conducting plate of methylmethacrylate PMMA is used.

Therefore the Kashima et al. ^{- to diff layer} light conducting plate does not contain any barium sulphate.]

Therefore in Kashima et al. there is suggestion of a thermoplastic layer containing barium sulphate.

The Examiner should also note the following from column 1, lines 63-67, of Kashima et al.:

"...backlighting device...that has a light conducting plate made of a light transmissive material (emphasis added), one of the major faces of said light conducting plate is provided with a light diffusing capability";

column 3, lines 4-8, wherein it is stated that to impart light diffusing ability to the light conducting plate a light diffusing material, such as paints and printing inks, is applied to part of the plate surface; and

column 3, lines 20-22, wherein it is stated that the light diffusing material is screen printed or otherwise printed in dots or strips on the surface of the light conducting plate.

In the examples, as for instance from column 10, lines 8-15, it is described that over the surface of the base conducting PMMA layer is applied a light diffusing material (titanium oxide) by screen printing a pattern of circular dots on a pitch of 1.0 mm in such a way that the coverage of the light diffusing material would be 40% at the point for a minimum value and 98% at the point for a maximum value.

In the examples it is also stated (column 12, lines 25-31) that when the coverage with the light diffusing material was held constant at 100%, an uneven luminance distribution was produced, as featured in curve e of Fig. 9.

In fact curve e in Fig. 9 shows that luminance drops to zero on the surface of the plate at a distance near the light source.

From the above the following is drawn:

The light conducting plate disclosed by Kashima, as such, has no diffusing ability.

The light diffusing material does not belong to the light conducting plate, since the patent makes clear that the light diffusing material is thereon applied in making the composite.

The light diffusing material does not form a continuous film, as made clear in the examples. In fact when with the diffusive material used by Kashima a continuous film is made (coverage 100%) a uniform light distribution on the surface of the plate is no longer obtained.

Therefore in Kashima et al. there is no teaching or suggestion of a light diffusing composite made of thermoplastic material, wherein a layer (i.e., a continuous film) of said thermoplastic composite contains barium sulfate particles, since in Kashima et al. continuous films of diffusive material do not work.

One of skill in the art would not have drawn from Kashima et al. that an homogeneous light distribution could have been achieved by using a diffusive thermoplastic layer containing 0.01-2% by wt of barium sulphate.

Those skilled in the art also would not have drawn from Kashima that barium sulphate is more advantageous than the titanium oxide used by Kashima et al.

Additionally on page 2, line 4, of the Advisory Action, it is asserted that "Applicant argues that Kashima et al. has no diffusing capability".

The Examiner seems to be therein referring to the light conducting plate of Kashima et al.

The Examiner should note that on page 3, 7th full sentence of the Request for Reconsideration After Final Rejection filed on September 16, 2003, Applicants stated that the Kashima et al. light conducting plate has no diffusing capability per se (emphasis added).

According to Applicants, the above comments regarding Kashima et al. make clear that Kashima et al. is teaching a light conducting plate, that as such has no light diffusing capability, since to provide said light diffusing capability a light diffusive material should be screen printed on a surface of the plate.

The last sentence of the Advisory Action asserts that "Applicant argues that light diffusing material can be absent from the Kashima reference. Although Applicant points to one embodiment of the reference, the embodiment does not limit the scope of the invention, which does contain light diffusing capability."

The technical problem to be solved by the present invention was to obtain a uniform light distribution on the surface of a composite. *- int use*

This technical problem was solved by Applicants by using a composite of a base conducting layer and a light diffusing thermoplastic layer containing barium sulphate. *- int use*

Although it is difficult for the Applicants to understand the above Examiner's statement, it seems that the Examiner may be asserting that the present invention is reputed obvious over Kashima et al. since Kashima et al. use barium sulphate to obtain light diffusion capability.

The Examiner should note that the Kashima et al. provides a completely different solution to the above technical problem. *- int use*

In fact in the composite of Kashima et al., light diffusion with barium sulphate, as herein above shown, is obtained without using a continuous diffusing film, nor is a thermoplastic film or layer containing barium sulphate therein even remotely suggested. Thus, for the above reasons, along with the reasons discussed in Applicants' September 16, 2003, Request for Reconsideration After Final Rejection, reconsideration

and withdrawal of the rejection of claims 1-14 and 16 under 35 U.S.C. § 103(a) are respectfully requested.

Applicants respectfully submit that this application is in condition for allowance and such action is earnestly solicited. If the Examiner believes that anything further is desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below to schedule a personal or telephone interview to discuss any remaining issues.

In the event this paper is not being timely filed, Applicant respectfully petitions for an appropriate extension of time. Any additional fees may be charged to Counsel's Deposit Account 01-2300, **making reference to Attorney Docket No. 108907-09021.**

Respectfully submitted,



Robert K. Carpenter
Registration No. 34,794

Customer No. 004372
ARENT FOX KINTNER PLOTKIN & KAHN, PLLC
1050 Connecticut Avenue, N.W., Suite 400
Washington, D.C. 20036-5339
Tel: (202) 857-6000
Fax: (202) 638-4810
RKC/tdd

BEST AVAILABLE COPY